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SEQUENCE LISTING

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FISCHER, DIETMAR

<120> METHOD FOR TREATING NEUROLOGICAL DISORDERS

<130> 701039-054381-PCT

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<141> 2004-12-16

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<151> 2003-12-16

<160> 18

<170> PatentIn Ver. 3.3

<210> 1
<211> 40
<212> PRT
<213> Homo sapiens

<400> 1
Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly
1 5 10 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu
20 25 30

Leu Val Gln Lys Tyr Ser Asn Ser
35 40

<210> 2
<211> 25
<212> PRT
<213> Homo sapiens

<400> 2
Ile Gln Lys Ser Asp Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser
1 5 10 15

Glu Val Ala Ile Ser Glu Glu Leu Val
20 25

<210> 3
<211> 25
<212> PRT
<213> Homo sapiens

<400> 3
Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
1 5 10 15

Lys Tyr Ser Asn Ser Ala Leu Gly His
20 25

<210> 4
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4
Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val
1 5 10 15
Asn Cys Thr Ile Lys Glu Leu Arg Arg
20 25

<210> 5
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5
Ala Leu Gly His Val Asn Cys Thr Ile Lys Glu Leu Arg Arg Leu Phe
1 5 10 15
Leu Val Asp Asp Leu Val Asp Ser Leu
20 25

<210> 6
<211> 40
<212> PRT
<213> Homo sapiens

<400> 6
Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly
1 5 10 15
His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu
20 25 30
Leu Val Gln Lys Tyr Ser Asn Ser
35 40

<210> 7
<211> 66
<212> PRT
<213> Homo sapiens

<400> 7
Phe Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu
1 5 10 15
Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu
20 25 30
Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Cys
35 40 45
Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp
50 55 60

Ser Leu
65

<210> 8
<211> 473
<212> PRT
<213> Homo sapiens

<400> 8
Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
1 5 10 15

Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val
20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
35 40 45

Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu
50 55 60

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys
65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile
85 90 95

Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu
100 105 110

Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly
115 120 125

Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
130 135 140

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
145 150 155 160

Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp
165 170 175

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser
180 185 190

Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
195 200 205

Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp
210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala
225 230 235 240

Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg
245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser
 275 280 285
 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn
 290 295 300
 Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp
 305 310 315 320
 Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys
 325 330 335
 Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro
 340 345 350
 Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Ser
 355 360 365
 Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe
 370 375 380
 Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Val Arg Pro
 385 390 395 400
 Glu Gly Ser Glu Pro Pro Gly Phe Pro Thr Ser Gly Pro Arg Arg Arg
 405 410 415
 Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly
 420 425 430
 Gln Ala Gly Ser Gly Gly Thr Gly Asp Ser Glu Gly Ser Gly
 435 440 445
 Ala Leu Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu
 450 455 460
 Val Leu Trp Thr Val Leu Gly Pro Cys
 465 470

<210> 9
 <211> 473
 <212> PRT
 <213> Mus musculus

<400> 9
 Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
 1 5 10 15
 Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
 20 25 30
 Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
 35 40 45

Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
 50 55 60

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Gln Ser Cys

65	70	75	80
Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Arg Ile			
85	90		95
Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu			
100	105		110
Ser Asp Asn Ala Gln Leu His Val Val Asp Pro Thr Thr Phe His Gly			
115	120		125
Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Arg Glu			
130	135		140
Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr			
145	150		155
160			
Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp			
165	170		175
Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser			
180	185		190
Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu			
195	200		205
Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp			
210	215		220
Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met			
225	230		235
240			
Leu Pro Ala Glu Val Leu Met Pro Leu Arg Ser Leu Gln Tyr Leu Arg			
245	250		255
Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp			
260	265		270
Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn			
275	280		285
Leu Pro Gln Arg Leu Ala Asp Arg Asp Leu Lys Arg Leu Ala Ala Ser			
290	295		300
Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Ile Gln			
305	310		315
320			
Thr Ser Gln Leu Thr Asp Glu Glu Leu Leu Ser Leu Pro Lys Cys Cys			
325	330		335
Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro			
340	345		350
Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr			
355	360		365
Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe			
370	375		380
Gly Thr Leu Pro Ser Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro			

385	390	395	400
Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg			
405	410	415	
Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly			
420	425	430	
Gln Ala Gly Ser Gly Ala Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly			
435	440	445	
Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu			
450	455	460	
Val Leu Trp Thr Val Leu Gly Pro Cys			
465	470		
<210> 10			
<211> 344			
<212> PRT			
<213> Homo sapiens			
<400> 10			
Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu			
1	5	10	15
Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val			
20	25	30	
Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu			
35	40	45	
Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu			
50	55	60	
His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys			
65	70	75	80
Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile			
85	90	95	
Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu			
100	105	110	
Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly			
115	120	125	
Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu			
130	135	140	
Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr			
145	150	155	160
Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp			
165	170	175	
Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser			
180	185	190	

Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
195 200 205

Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp
210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala
225 230 235 240

Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg
245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser
275 280 285

Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn
290 295 300

Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp
305 310 315 320

Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys
325 330 335

Gln Pro Asp Ala Ala Asp Lys Ala
340

<210> 11
<211> 310
<212> PRT
<213> Homo sapiens

<400> 11
Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
1 5 10 15

Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val
20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
35 40 45

Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu
50 55 60

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys
65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile
85 90 95

Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu
100 105 110

Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly
115 120 125

Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
130 135 140

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
145 150 155 160

Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp
165 170 175

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser
180 185 190

Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
195 200 205

Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp
210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala
225 230 235 240

Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg
245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser
275 280 285

Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn
290 295 300

Asp Leu Gln Gly Cys Ala
305 310

<210> 12
<211> 344
<212> PRT
<213> Rattus norvegicus

<400> 12
Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Pro Thr Trp Val Leu
1 5 10 15

Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Arg Pro Gln Gln Gly Leu
35 40 45

Gln Ala Val Pro Ala Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
50 55 60

His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile
85 90 95

Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu
				100			105					110			
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly
	115				120							125			
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu
	130				135						140				
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr
	145			150				155			160				
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp
	165				170						175				
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser
	180				185						190				
Val	Pro	Glu	His	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu
	195				200						205				
Leu	His	Gln	Asn	His	Val	Ala	Arg	Val	His	Pro	His	Ala	Phe	Arg	Asp
	210				215						220				
Leu	Gly	Arg	Leu	Met	Thr	Leu	Tyr	Leu	Phe	Ala	Asn	Asn	Leu	Ser	Met
	225				230					235			240		
Leu	Pro	Ala	Glu	Val	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gln	Tyr	Leu	Arg
	245				250					255					
Leu	Asn	Asp	Asn	Pro	Trp	Val	Cys	Asp	Cys	Arg	Ala	Arg	Pro	Leu	Trp
	260				265					270					
Ala	Trp	Leu	Gln	Lys	Phe	Arg	Gly	Ser	Ser	Ser	Gly	Val	Pro	Ser	Asn
	275				280						285				
Leu	Pro	Gln	Arg	Leu	Ala	Gly	Arg	Asp	Leu	Lys	Arg	Leu	Ala	Thr	Ser
	290				295					300					
Asp	Leu	Glu	Gly	Cys	Ala	Val	Ala	Ser	Gly	Pro	Phe	Arg	Pro	Phe	Gln
	305				310					315			320		
Thr	Asn	Gln	Leu	Thr	Asp	Glu	Glu	Leu	Leu	Gly	Leu	Pro	Lys	Cys	Cys
	325				330						335				
Gln	Pro	Asp	Ala	Ala	Asp	Lys	Ala								
	340														

<210> 13
 <211> 310
 <212> PRT
 <213> Rattus norvegicus

<400> 13
 Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Pro Thr Trp Val Leu
 1 5 10 15
 Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
 20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Arg Pro Gln Gln Gly Leu
 35 40 45

Gln Ala Val Pro Ala Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
 50 55 60

His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
 65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile
 85 90 95

Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu
 100 105 110

Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly
 115 120 125

Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
 130 135 140

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
 145 150 155 160

Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp
 165 170 175

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser
 180 185 190

Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
 195 200 205

Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
 210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
 225 230 235 240

Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
 245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
 260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Gly Val Pro Ser Asn
 275 280 285

Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Thr Ser
 290 295 300

Asp Leu Glu Gly Cys Ala
 305 310

<211> 66
<212> PRT
<213> Homo sapiens

<400> 14
Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly
1 5 10 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu
20 25 30

Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Cys Thr
35 40 45

Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser
50 55 60

Leu Lys
65

<210> 15
<211> 40
<212> PRT
<213> Homo sapiens

<400> 15
Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly
1 5 10 15

His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu
20 25 30

Leu Val Gln Lys Tyr Ser Asn Ser
35 40

<210> 16
<211> 37
<212> PRT
<213> Homo sapiens

<400> 16
Arg Ile Tyr Lys Gly Val Ile Gln Lys Ser Asp Glu Gly His Pro Phe
1 5 10 15

Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
20 25 30

Lys Tyr Ser Asn Ser
35

<210> 17
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 17
tatggctagc tatgcacata ctttcacaga att 33

<210> 18
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 18
ctattnaat atcattgctg taatcataat ttgtc 35